

Claims

[1] An NC automatic lathe comprising:

a base board;

a headstock that is mounted on the base board and provided with a main spindle, the headstock being arranged to move in a direction of a Z1 axis that is parallel to an axial direction of the main spindle;

a back attachment that is mounted on the base board and provided with a sub spindle that is arranged to be opposed to the headstock, the back attachment being arranged to move in a direction of a Z2 axis that is parallel to the axial direction of the main spindle, and in both directions of an X2 axis and a Y2 axis that are perpendicular to the direction of the Z2 axis and are perpendicular to each other;

a guide bush that is mounted on the base board between the headstock and the back attachment;

a first turret tool post that is mounted on the base board and arranged at a side of the guide bush to move in both directions of an X1 axis and a Y1 axis that are perpendicular to the axial direction of the main spindle and are perpendicular to each other;

a second turret tool post that is mounted on the base board and arranged at a side of the guide bush to move in a direction of a Z3 axis that is parallel to the axial direction of the main spindle, and in both directions of an X3 axis and

a Y3 axis that are perpendicular to the direction of the Z3 axis and are perpendicular to each other; and

a fixed back machining tool unit that is mounted on the base board and arranged at a position offset with respect to at least one of the first turret tool post and the second turret tool post, to the back attachment in a direction of a Z axis that is parallel to the axial direction of the main spindle, the fixed back machining tool unit being provided with tool holding portions in at least two rows and two lines in both directions of an X axis and a Y axis that are perpendicular to the direction of the Z axis and are perpendicular to each other.

[2] The NC automatic lathe according to claim 1, wherein the second turret tool post is configured that a back machining tool is attachable thereto.

[3] The NC automatic lathe according to claim 2, wherein at least two front face tools and at least two back face tools are attachable to a tool attaching face of the second turret tool post.